BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of:	)	
	)	
Application of SBC Communications, Inc.,	)	
Southwestern Bell Telephone Company,	)	CC Docket No. 97-121
and Southwestern Bell Communications	)	
Services, Inc., d/b/a Southwestern Bell	)	
Long Distance, for Provision of In-region	)	
InterLATA Services in Oklahoma	)	

AFFIDAVIT OF SAMUEL L. KING
On Behalf of MCI Telecommunications Corporation

I, Samuel L. King, being first duly sworn upon oath do hereby depose and state as follows:

1. My name is Samuel L. King. I serve as the Director of Local Project Coordination for MCImetro, a division of MCI Telecommunications Corporation.

2. I received a Bachelor of Science degree in Business Administration from the Pennsylvania State University and joined MCI in June, 1985 in the Information Systems Development organization as a systems analyst. I proceeded to serve as project lead for development and implementation of MCI's intelligent network platform supporting such services as 800, Vnet, Operator Services and 900.

3. In October of 1992, I joined MCI's Access Services group as Senior Manager of Systems for Competitive Local Exchange Carriers (CLECs). As Senior Manager, I oversaw the

development of specific system requirements to enable CLECs to interface with MCI as an interexchange carrier (IXC).

4. In January of 1994, I transferred into MCImetro and established the local systems development group with specialization on the Business Support Systems such as service ordering, billing and customer service.

5. I now serve as Director of Local Project Coordination with specific responsibility for the development and implementation of local number portability, resale, and incumbent local exchange carrier (ILEC) OSS Interface development. As such, I or members of my department have personal familiarity with the issues discussed herein.

6. The purpose of my affidavit is to respond to SWBT's contentions (a) that it provides unbundled access to Operations Support Systems (OSS) functions in conformance with FCC regulations and (b) that its OSS systems and interfaces are fully ready and complete to satisfy its other obligations under section 271 of the Telecommunications Act. I conclude that SWBT is not operationally ready from an OSS perspective to provide interconnection, unbundled network elements, or resale in a timely, reliable, and nondiscriminatory manner, and in quantities that may be reasonably requested.

7. My affidavit is in two parts. Part I presents a general background on OSS functions, their development, and the role they play in the provision of local exchange service as well as the development of local competition. Part II explains why SWBT's OSS functions are not ready to provide CLECs interconnection and access to unbundled network elements or resale, in a timely, reliable, and nondiscriminatory manner.

8. In order better to enable the Commission to understand the particular ways in which SWBT's OSS functions and interfaces are not operationally ready, I will specifically respond, where appropriate, to contentions raised in the Affidavit of Elizabeth A. Ham submitted with SWBT's petition. I will not address SWBT's claimed "capacity readiness." Capacity readiness issues can be intelligently assessed only in the presence of adequate operational readiness. Because SWBT's systems are demonstrably not operationally ready, the further question of capacity readiness -- namely, what further increases in volume can the system accommodate? -- cannot be intelligently answered.

I. The role and importance of OSS

9. In order to appreciate the importance of OSS, it is necessary first to understand what OSS is and does. As one recent industry publication put it, "OSS includes everything that runs or monitors the network, such as trouble reporting or billing systems, but is not actually the network itself."[1] Stated otherwise, OSS consists of all the computerized and automated systems, together with associated business processes, that ensure the carrier can satisfy customer needs and expectations. In today's environment, a carrier simply cannot compete without powerful and efficient operations support capabilities. It is customary and useful to distinguish five discrete business functions OSS serves: pre-ordering, ordering, provisioning, maintenance & repair, and billing, as is explained in the FCC's Local Competition Order.[2]

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[1] Ed Feingold, Making Sense of OSS, Billing World, Jan. 1997, at 21, 22.

[2] See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, at ¶¶ 515, 518, CC Docket No. 96-98, FCC 96-325 (rel. Aug. 8, 1996) (hereinafter "Local Competition Order").

10. Like all Bell Operating Companies (BOCs), SWBT has for years utilized highly complex OSS systems to successfully manage its internal processes and customer interactions. These well-tested systems ensure, for example, that customer service representatives have immediate real-time access to all information necessary to respond fully and correctly to customer queries about such things as the variety and prices of services available, or the status of repair calls. They also ensure, among other things, that customer orders are correctly processed and that bills are accurate and timely.

11. SWBT's existing systems are complete and adequate to serve its own retail customers. Consistent with the Telecommunications Act of 1996, however, changes must be made to enable competition to develop in the local markets. To the extent new BOC competitors such as MCI must rely on the BOC's network and OSS capabilities for a realistic opportunity to compete, it will be essential for the BOC to develop and implement OSS interfaces and downstream processes sufficient to ensure that they can provide unbundled network elements and resale rapidly and effectively in volumes adequate to satisfy demand. Another related point is that the FCC's rules specifically require that ILECs develop interfaces capable of providing CLECs nondiscriminatory unbundled access to OSS functions. I understand this requirement to mean that ILECs must provide parity to requesting CLECs across three dimensions: scope of information available; accuracy of information supplied; and timeliness of communication.

Interfaces and Specifications

12. In order to determine whether a BOC has satisfied the twin requirements that it has implemented OSS systems and interfaces capable of ensuring that it can "fully implement" the competitive checklist, and that it provides nondiscriminatory unbundled access to OSS functions

and databases, two questions are key: First, are the interfaces and specifications the BOC employs to communicate with the CLECs adequate to fulfill competitive needs? Second, assuming the BOC proposes to use a competitively acceptable interface to provide competitors access to a particular OSS function, has there been sufficient experience with the interface and associated systems and processes so as to ensure they will work "as advertised"?

13. In theory there are numerous ways a CLEC might be able to access BOC OSS functions. One basic distinction is between automated access and manual access.

14. Manual access means that the CLEC's access is mediated by human intervention on the part of the BOC. For example, when a CLEC orders a resale service or unbundled element manually, it ordinarily means that the CLEC transmits an order form to the BOC by facsimile, at which point a BOC employee types the information supplied on the form into the BOC's computerized order entry system. Manual intervention also occurs when, after information is exchanged electronically, a BOC representative must re-enter or otherwise manipulate it before it can be processed downstream.

15. Manual access arrangements are simply not compatible with MCI's needs as a new entrant. Every manual intervention causes delay, sometimes substantial, and creates significant risk of error. By relying upon manual interventions, the ILEC makes its competitors dependent on the hours, efficiency, and accuracy of its own employees -- including their incentive or lack of incentive to be efficient and accurate. Also, manual arrangements increase CLECs' costs in two ways: CLECs must employ more people to handle the process and to audit the ILEC's performance; and the ILEC will try to pass its own inflated costs through to the CLECs. Accordingly, solutions that require manual intervention on the ILEC's side cannot be acceptable

in either the short or long term. The question, then, is what automated arrangements are satisfactory.

16. Automated access means that information is exchanged between the CLEC and BOC computers. This can be done through a variety of different interfaces and protocols that range widely in degrees of sophistication and utility.

17. The most sophisticated type of automated access is termed electronic bonding and is articulated by several different specific protocols, the most common of which is the Open Systems Interconnect (OSI) Common Management Information Services Element (CMISE) Common Management Information Protocol (CMIP) network management protocol. Electronic bonding solutions are the most sophisticated and useful because, in certain applications, they can allow new entrants to approximate the same real-time access to the BOC's functions as the BOC itself enjoys. From the customer's perspective, interactions with a CLEC that has electronically bonded to the ILEC are indistinguishable from interactions with the ILEC. Furthermore, because electronic bonding links the CLEC's existing OSS system to that of the ILEC, the CLEC does not need to develop a new OSS to interface with the ILEC for a given function.

18. Less sophisticated automated access arrangements include dedicated access arrangements. In these arrangements, a CLEC has a computer terminal that gives it direct access to the ILEC's system. The ILEC's system is not connected to the CLEC's system, however. Thus, when the CLEC obtains information from the ILEC system, it must retype that information into its own system.

19. Another less sophisticated automated arrangement involves the transfer of data between computer systems in batches. These "batch transfer" solutions work much like

electronic mail. File transfer protocol, perhaps the classic batch interface, transmits large amounts of data at scheduled, periodic intervals. A second common batch transfer interface is Electronic Data Interface ("EDI").

20. Each ILEC should adopt the automated interfaces and data formats adopted and approved by the relevant national standard-setting bodies or industry forums. The four principal groups are: the OBF of the Carrier Liaison Committee; the T1 Committee; the Electronic Communications Implementation Committee ("ECIC"), and the Telecommunications Industry Forum ("TCIF"). All four are sponsored by the Alliance for Telecommunications Industry Solutions ("ATIS") and accredited by ANSI. ILECs should adopt standardized systems for two reasons. First, for CLECs that hope to compete in markets presently controlled by different BOCs, it is absolutely critical that interfaces are uniform. The costs of developing systems and software and of training necessary to use any particular interface are substantial. This is why most BOCs try to unify their own systems. A nationwide CLEC like MCI must be able to realize similar economies. We can only do so, however, if the several large ILECs conform to nationally standardized interfaces and formats.

21. Second, the industry forums are well positioned to resolve which interfaces and formats are reasonably necessary and practical for each particular OSS function or sub-function. Different functions and services may create different OSS needs. For example, pre-ordering functions which are conducted while the carrier's service representative is actually speaking with the end-user require real time accessibility; billing functions do not.

22. For both of these reasons, I agree that "[i]deally, each incumbent LEC would provide access to support systems through a nationally standardized gateway." Local

Competition Order ¶ 527. Consistent with this view, MCI is investing its development funds for OSS in the technical interface solutions developed through the industry forums. The FCC chose to rely on the carriers to agree to nationally standardized interfaces voluntarily. I believe that the likelihood that the large ILECs and CLECs will reach voluntary consensus on nationally uniform interfaces will be sorely tested if the BOCs are allowed to offer in-region long distance services before such solutions are adopted. Because the time and additional capital investment required for CLECs to develop non-standard OSS interfaces are substantial, giving the BOCs incentives toward standardization is critical.

23. While the industry forums have made substantial progress, they have not yet established standards for all OSS functions. Although this process can and should be completed promptly, one still has to ask what a BOC should be expected to do in the interim in order to satisfy section 271. Part of the answer is that the BOC should be expected to adopt the least costly interim solution that would give requesting carriers the same level of access to the BOC's OSS functions as the BOC itself enjoys. Where the basic shape of the industry solution is apparent, for example, the BOC should deploy an interface that fills in the contours of that shape, rather than deploying an entirely separate interface. That way both the BOC and the CLEC can concentrate their resources on implementing industry standards, while still achieving needed additional functionality through incremental expenditures prior to completion of those standards.

24. In short, a BOC's OSS interfaces should be deemed satisfactory only if these conditions are satisfied: (1) Wherever there exists an existing industry standard, the BOC must have adopted and implemented it; and (2) wherever an industry standard does not yet exist, the BOC must (a) enter into a binding contractual commitment (backed up by adequate contractual

guarantees and regulatory penalties) to comply with industry standards as soon as possible (pursuant to a specified implementation schedule) and (b) offer and implement an interim solution that gives requesting carriers the same level of access that the BOC's operational groups have to its systems, and that is as consistent as possible with expected industry standards.

Operational Readiness

25. The adoption and implementation of an appropriate OSS interface, configured to appropriate specifications, is a necessary condition for the development of local competition, but it is far from sufficient. The interface merely governs the communication between the BOC and CLECs. The theoretical capacity for rapid and efficient communication between the carriers is of minimal benefit if either the BOC lacks the internal systems necessary satisfactorily to effect the functions a particular interface is designed to support, or the CLECs lack the systems, software, and training needed to make efficient and effective use of the OSS access provided.

26. In some cases the ILEC can employ the business systems it uses for its own retail customers in order to serve CLECs. But in some cases the new CLEC-ILEC dynamic does impose new requirements on the ILEC's business systems. For example, before the 1996 Act, the ILECs did not have OSS systems in place to effectuate the unbundling of local switching. When a CLEC orders unbundled elements, the ILEC faces a new challenge not only in receiving and understanding that order (this is where the ordering interfaces come in), but also in carrying out that order. Thus, in addition to implementing an adequate interface, the ILEC must put in place business processes to use that interface as it is intended.

27. Assuming that an ILEC has deployed an appropriate interface and adequate downstream systems, it remains independently critical that the CLEC is able to use the ILEC's interfaces effectively. One may be tempted to assume that is the CLEC's own problem, and that the ILEC has no responsibility to train or support the new entrants. From the perspective of system development, that is a mistaken view. The ILECs in general, and certainly the BOCs, drive the process. They select the interface, tailor its specifications and vocabulary, and control the timing of its implementation. Moreover, as the staff of the Wisconsin Public Service Commission has explained, because a CLEC will have to rewrite its own OSS interfaces whenever an ILEC modifies its interfaces, "a company with significant market share [like the BOCs] can extend that market share" simply by revising its OSS specifications.[3] This is true even where a BOC nominally adopts an interface approved by an industry forum, because most industry-standard interfaces are loosely defined to allow individual carriers flexibility in tailoring their own specifications. Consequently, just as the market requires the manufacturer of a complicated software package to provide initial and ongoing customer support, regulators must ensure that the BOCs provide CLECs with adequate training and assistance -- including complete and intelligible manuals and pull-down on-screen menus where necessary.

28. In order for an OSS interface to work as planned, the interface itself, the business processes, and the training must all function appropriately. Ensuring that this occurs is a lengthy process and requires careful planning and testing. After each carrier's systems are developed and deployed, it is necessary to conduct "integration" testing -- full end-to-end trials designed to make

[3] Memorandum Re: Matters Relating to Satisfaction of Conditions for Offering InterLATA Service, Docket No. 6720-TI-120, at 11 (Wisc. PSC, Feb. 6, 1997).

sure that the systems can communicate properly with each other to accomplish the intended results in the designed manner. After integration testing has been successfully completed, it is time to put the systems into actual competitive use, supporting "live" customer transactions. Even once this stage of actual implementation is reached, however, testing is not completed. To the contrary, it is almost inevitable that the early stages of actual competitive use will reveal design and operating flaws that had escaped detection up through integration testing, thus requiring further trouble-shooting and system modification.

29. Experience proves the critical point that a successfully tested OSS system is not the same thing as an operationally and commercially satisfactory system. The access arena shows why. For example, Bell Atlantic has been re-engineering many of its OSS systems since 1995. In November 1996, it implemented the second phase of the new release of its Subscription System, which processes PIC changes, allowing customers to change carriers. Bell Atlantic assured MCI and other IXCs that its new version had satisfied thorough internal testing before being introduced for commercial use. Nonetheless, the new system has been disastrous in actual operation. For example, it has failed to process numerous properly inputted PIC change orders, has delayed the processing of many others for a week or longer, and has returned incorrect responses to MCI orders that, among other things, incorrectly report existing subscriber accounts as nonexistent or closed. Furthermore, Bell Atlantic's OSS lacked controls to identify the processing problem quickly. As a result, weeks passed before MCI was even notified that Bell Atlantic was not properly effectuating customer PIC changes. Needless to say, these system failures have caused substantial customer confusion and dissatisfaction. They have also imposed losses on MCI that could amount to a million dollars in lost revenue. Bell Atlantic has acknowledged that these

problems are directly due to errors in its OSS systems. However, these errors have not all been corrected even today.

30. As the foregoing discussion should make clear, from an OSS perspective, paper promises are not enough to ensure effective real-world application. Because deploying "operationally ready" OSS is a substantial and time-consuming undertaking, there is a real difference between saying a system is ready and actually using it to provide services in a commercially satisfactory way. In light of the innumerable potential glitches and pitfalls that must be eliminated prior to commercial availability, one cannot know how well things can be provided until they are supported by a full and varied track record of having been provided. In short, OSS must be in real competitive use (not just business trials), subject to auditing and monitoring of key performance indicators and/or operation performance indicators before OSS can be deemed to be operationally and competitively satisfactory.

II. Problems With SWBT's Application

Summary

31. Given this background, for reasons I will explain in detail, I believe SWBT's application is patently inadequate from an OSS perspective. SWBT appears far from either offering non-discriminatory unbundled access to OSS functions or ensuring that other checklist items can be provided in timely, reliable, nondiscriminatory fashion, and in volumes adequate to meet demand. In my view, SWBT's application falls short both because it employs inappropriate interfaces and because it does not demonstrate that the interfaces and supporting systems are operationally ready.

32. First, although SWBT offers a variety of automated interfaces, there are many important OSS functions for which SWBT offers no automated interface. For example, a high percentage of business orders involve some sort of complex service such as multi-line hunting and/or involve more than 30 lines. SWBT offers no automated interface capable of handling such orders. SWBT also offers no automated interface capable of handling orders for any unbundled elements other than loops, interim number portability, and switch ports.

33. Second, while SWBT commits itself to implementation of most present and future industry standards, and deserves praise for its commitment, this commitment is not universal. SWBT has not stated that it will accept -- and elsewhere has explicitly rejected -- use of the standard codes recently defined by the Telecommunications Industry Forum ("TCIF") Electronic Data Interchange ("EDI") Service Order Sub-Committee ("SOSC") as Feature Codes. It also has rejected industry standard Carrier Access Billing System Billing Output Specification ("CABS BOS") for resale billing, even though its merger partner, PacBell, has agreed to use CABS BOS. Finally, in several instances where it has accepted industry standards, it has refused to supplement those standards in order to make them workable before final specifications are released.

34. Third, SWBT has not shown that those of its interfaces that are acceptable on their face are operationally ready. Sometimes, as in the case of SWBT's inferior, proprietary EASE system, SWBT has experience in other contexts to which it can point as some evidence that the system will work as advertised. This is generally not true for those systems which are most acceptable on their face, such as SWBT's standardized EDI interface for ordering. Nor does SWBT have any other significant evidence that these interfaces will work. SWBT acknowledges that it has not employed any other of its automated interfaces with CLECs in a competitive

environment, Ham Aff. ¶ 45; it does not even appear to have yet tested most of these interfaces with CLECs; indeed, it does not even provide results of internal tests to show these systems will work as advertised.

35. SWBT has refused to allow MCI to submit test orders in Missouri or Texas, claiming that it could not begin such tests until MCI had a signed interconnection agreement and was a certified carrier in those states. Although SWBT may now relent, testing has not yet begun. As a result, SWBT is certainly not in a position to claim that its interfaces, business processes, and training have been proven to work. Even SWBT admits that implementation of at least one key interface, EDI for ordering, will require significant additional work. Ham Aff. ¶ 29. I will elaborate on these problems in the context of my discussion of the various OSS functions below.

36. I would like to note that the problems I discuss below are based solely on the very general materials SWBT has provided to the Commission and on SWBT's limited "demonstration" to MCI of its OSS systems in March. Along with its refusal to agree to testing, SWBT has refused to provide MCI with any specifications for its OSS systems. As a result, there may be many problems with these systems other than those I detail below. In addition, because SWBT has not provided MCI with any specifications, MCI has been unable to begin the development work it would need to undertake in order to use SWBT's systems. Systems development requires work by both the ILEC and CLEC; SWBT cannot proclaim its systems operational when it has prevented the necessary work by the CLECs.

Pre-ordering

37. The pre-order function involves the exchange of information between carriers prior to, and in anticipation of, the placing of an actual order. Of the eleven key pre-order sub-functions that are currently being worked on by the OBF, SWBT only claims that it is fully offering automated interfaces for five: (1) access to customer service records; (2) the ability to select and reserve telephone numbers while the end-user is on the line; (3) determination of features available to the end-user; (4) address validation; and (5) the ability to determine long distance carrier. SWBT offers a sixth function -- the ability to select an order due date and to schedule any necessary outside work -- for resale only. SWBT does not offer any automated access to the other five functions: (1) directory listings information; (2) block of direct inward dial (DID) numbers inquiry; (3) telephone number's trouble history; (4) DID trunk inquiry; and (5) unbundled network element service provider inquiry.

38. For those five (six for resale) pre-order functions it is offering, SWBT offers a choice of several interfaces. All of these interfaces are proprietary. Proprietary systems create significant industry variations, creating challenges for training CLEC representatives to service customers across multiple service areas. MCI does not have a separate customer service center for each RBOC -- let alone each ILEC. Imagine training personnel on numerous different systems just to reserve a phone number for a new customer or to ascertain the next available date for customer service.

39. While SWBT is, to a certain extent, correct that "[n]ational standards for electronic interfaces for pre-ordering have not yet been developed," Ham Aff. ¶25, the industry has agreed, through consensus in the ECIC Committee of ATIS, that EDI via TCP/IP is the

appropriate interim interface for pre-ordering. The EDI subcommittee has already mapped the vast majority of data elements needed for this interface; it has done so in the process of developing an EDI interface for ordering. Although inferior to the electronic bonding solution that MCI advocates as the long term solution the industry should adopt, EDI TCP/IP is a good solution for pre-ordering for the intermediate term. EDI TCP/IP is a particularly rapid form of EDI that connects the CLEC's systems to the BOC's system and enables pre-ordering information to be sent in near real-time.

40. The industry has not yet released specifications for EDI TCP/IP. Perhaps SWBT intends to include EDI TCP/IP in its commitment to adopt standard interfaces within 120 days of their release. If so, SWBT should be commended. But it should first make its commitment clear.[4] Moreover, since SWBT is fully aware of the general shape of the industry solution for pre-ordering, including most of the data elements the solution will use, it should implement a pre-ordering system using EDI TCP/IP prior to its entry into long distance.

41. In addition to being deficient because they are proprietary, SWBT's interfaces are substantively deficient. SWBT's first system, EASE, is limited to resold service for customers who do not require a large number of lines. Ham Aff. ¶ 22. Moreover, EASE is a dedicated access system that essentially involves the provision of SWBT's own OSS terminals (or screens) to MCI.[5] Because EASE does not connect CLEC systems to SWBT systems, EASE requires

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[4]SWBT makes this commitment explicit with respect to EDI for ordering. Ham Aff. ¶ 31. SWBT does not make a similar explicit commitment for pre-ordering, and even its commitment with respect to ordering is not included in its SGAT.

[5]When EASE requires the actual use of additional terminals rather than the use of separate screens on a single terminal, the sheer physical space required make it impractical. MCI customer service representatives do not have space for a different terminal for each ILEC.

MCI customer service representatives to first use EASE and then use MCI's own internal system. In contrast, an SWBT representative only has to use SWBT's own internal system. For example, in taking a customer's order to add a feature, a service representative must enter a customer's address into the system. The address generally must exactly match the address already in the system in order to be processed correctly (e.g., it cannot say 19th St. instead of 19th Street). A SWBT service representative can simply enter the customer's name and automatically retrieve the proper address. An MCI representative using EASE could also retrieve the proper address, but then would have to manually retype the address into MCI's system. Such dual data entry not only creates delay while the customer waits on the line, it also inevitably results in order entry errors that impact customers' requested services.

42. SWBT's second pre-ordering interface, Verigate, suffers the same critical flaw as EASE. Although Verigate, unlike EASE, allegedly includes pre-ordering capabilities for unbundled elements as well as resale, Verigate also is not connected to a CLEC's systems. Verigate therefore suffers the same problem of dual data entry suffered by EASE.

43. SWBT's final pre-ordering interface, DataGate is the only one offered by SWBT which connects CLEC systems to SWBT's systems. Because of SWBT's failure to provide specifications to MCI, MCI does not have enough detailed information on DataGate to know whether it can provide commercially satisfactory access and functionality -- setting aside the fundamental deficiencies caused by its proprietary nature.

44. Finally, and most importantly, SWBT provides no basis on which to conclude that its pre-ordering interfaces are operationally ready. This is particularly so with respect to DataGate -- the only interface that appears to approach the necessary functionality for use by

CLECs. SWBT does not contend that any of its pre-ordering interfaces have ever been used in a competitive environment by any CLECs, much less that any of these interfaces have been subjected to pre-ordering requests from several CLECs at the same time, thereby proving that they can handle realistic volumes. In fact, SWBT does not even contend that any of its interfaces have been successfully tested by CLECs -- or even, for that matter, internally.

45. All that SWBT contends with respect to DataGate is that it is currently being tested by AT&T and Sprint. Ham Aff. ¶ 24. Certainly, the mere fact of testing, the results of which are unknown, is not evidence that DataGate will work as promised. Only successful deployment in a competitive environment, and handling of associated volumes, can provide such proof. Such proof is especially important for DataGate, because DataGate has never been used in the access environment and thus is likely to have particularly severe implementation difficulties.

46. As evidence of the operational nature of Verigate, an interface which is clearly inadequate even if it were ready, SWBT points to its use to perform some transactions in the access environment beginning in 1996. Ham Aff. ¶ 54. Assuming these transactions were successful, a fact to which SWBT does not attest, such success would provide some reason for optimism that implementation difficulties in the competitive local environment would be less severe than otherwise. But such success hardly ensures that Verigate will instantly be equally effective in the competitive local environment. In the competitive local environment, Verigate must perform many functions that are completely unnecessary in the access world -- for example, number assignment, feature checks, and due date selection.

47. As evidence of the operational nature of EASE, SWBT's least adequate pre-ordering system, SWBT points to the use of EASE by SWBT's own customer service

representatives. EASE probably is the closest to operational of SWBT's pre-ordering interfaces. Unfortunately, this is of little help, because EASE is limited to resale for relatively small customers and involves manual re-keying in any case . MCI has no interest in employing a system of such limited functionality. Moreover, EASE's successful deployment by SWBT, while important, is not sufficient to demonstrate that EASE will work when used at high volumes by CLECS.

Ordering/Provisioning

48. After a CLEC's service representative has determined what phone service is desired by a new customer -- and has determined that that service will be provided by some combination of resale or unbundled network elements -- the representative must transmit the order to SWBT. SWBT offers several interfaces for ordering, including EDI. Ham Aff. ¶ 29. MCI fully supports SWBT's planned use of EDI; EDI is the approved industry solution and should be used by all ILECs.[6]

49. In conjunction with the ordering process, the provisioning process provides the means by which the ILEC reports on the status of orders to the CLECs. There are four provisioning sub-functions, i.e., four types of reports the provisioning ILEC must communicate to the requesting CLEC: (i) firm order confirmation; (ii) error notification; (iii) change in order status ("jeopardy notification"), and (iv) order completion. The OBF has already recognized EDI

[6]There are a few exceptions to the industry's general commitment to EDI, such as the ordering of local interconnection trunks where the industry plans to use a version of the process developed for ordering trunks in the access arena. SWBT does not indicate it has any automated process for ordering local interconnection trunks.

as the correct format for firm order confirmation; it is likely to soon recognize EDI as the correct format for the three other provisioning functions as well. SWBT offers EDI as an automated option for some provisioning functions. MCI fully supports SWBT's intended use of EDI. Nonetheless, SWBT's mere promise to provide an EDI ordering and provisioning interface is insufficient to satisfy the checklist requirement for entry into long distance.

SWBT Relies on Manual Processes for Many Types of Orders

50. SWBT has no automated interface available to process the vast majority of business orders for resale. SWBT readily concedes that neither EDI, nor its other automated ordering interfaces, can be used for "resold services of large business customers (those with over 30 lines) and certain complex serving arrangements (e.g. those that involve mutiline hunting, trunk groups, DID trunks, etc.)." Ham Aff. ¶ 35. Most business orders fall into these categories. Most businesses desire some sort of "complex serving arrangement." For example, multiline hunting, which directs a call to a second line if the original line dialed is busy, is quite basic. So are DID trunks -- in which multiple calls proceed to the business over a single trunk and then are directed to an extension by the business' own PBX.

51. SWBT also offers no automated ordering interfaces for any unbundled elements other than loops, interim number portability, and switch ports. SWBT's EASE interface is for resale only, Ham Aff. ¶ 28, SWBT's LEX system is not yet available, Ham Aff. ¶ 27; and SWBT's EDI interface has the limitations described above. Ham Aff. ¶ 35. Thus, SWBT has no automated ordering interface for unbundled switching, unbundled transport, trunks, ISDN, or any combination of unbundled elements, including the platform. Some of these items, such as

unbundled transport, are specifically enumerated in the checklist, and all of them are vitally important to CLECs.

52. SWBT's reliance on manual ordering processes for all of these types of orders is entirely unacceptable. Manual ordering processes cause delays when fax or phone lines are busy, and when the BOC customer service representative who receives the fax or phone call delays entering the information. Manual ordering processes also result in errors when the BOC customer service representative enters incorrect information. In MCI's experience with other ILECs, the use of manual interfaces for ordering has proven consistently disastrous. PacBell's manual intervention in the ordering process has resulted in vast delay in processing orders -- often amounting to months. It has also resulted in innumerable errors, such as loss of customer features during customer migration to MCI and failure to include new MCI customers in the 411 database. These delays and errors are so significant -- and so potentially harmful to MCI's reputation in the marketplace -- that MCI, like other CLECs, has been compelled to reduce the scale of its planned market entry. In short, by using manual processes, PacBell has effectively preserved its monopoly market share by forcing CLECs to "voluntarily" scale back marketing efforts as a means of limiting the damage that PacBell's manual processes cause. SWBT provides no reason to think that its manual ordering processes will be any better than those of PacBell.

53. In addition, in every instance where SWBT lacks an automated ordering interface, it also appears to lack an automated provisioning interface.[7] In fact, SWBT appears to lack an

[7]SWBT's SGAT does suggest that an automated provisioning process may sometimes be available even when EDI cannot be used for ordering. It states that "[a] file transmission may be provided to confirm order completions for R-Ease or B-Ease order processing. This file will provide service order information . . . regardless of order entry mechanism." Appendix OSS ¶ 3.6

automated interface altogether for at least one key provisioning function, jeopardy notification. Although it is not entirely clear that SWBT has any provisioning process where it lacks an automated process, MCI assumes that SWBT intends to use a manual process. This is also completely unsatisfactory -- as is again apparent from MCI's experience with PacBell's manual process of provisioning. PacBell representatives who "eyeball" MCI orders to check for errors have often notified MCI of ordering errors where there were no errors, or returned cryptic error messages that required significant effort to decipher. PacBell also has often delayed return of Firm Order Confirmations by weeks, thus preventing MCI from telling its customers when their service will be turned up. Finally, PacBell has often delayed completion notification by months, preventing MCI from billing the customer in the interim. This can result in significant customer dissatisfaction when the customer is presented with a large bill all at once.[8] Similar problems will almost certainly occur with SWBT -- these problems are largely inherent in use of manual interfaces to process high volumes of orders by employees who have no incentive to get things

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(emphasis added). However, SWBT does not give any details about this file transfer and how, or even whether, it works. Ms. Ham's affidvait does not mention this file transfer, and when SWBT demonstrated its OSS to MCI, this file transfer was not ready. In addition, even if this file transfer is available in some instances, it is not clear that it is available when order entry has been manual and whether it includes any provisioning process other than completion notification. Finally, a daily file transfer of a huge file of completion notifications would require MCI to match SWBT data to MCI orders and is not how completion notification should work.

[8]Some of these provisioning problems may be reduced by SWBT's Order Status feature which SWBT states will enable CLECs to check on the status of orders. Ham Aff. ¶ 33. However, CLECs should not have to repeatedly, and pro-actively check on the status of an order to determine if a confirmation date has been set or an order has been completed. When the BOC has completed a process, it should promptly notify the CLEC. This is unlikely without an automated interface.

right, and who, even if they made every effort, would nonetheless inevitably make some mistakes and create delay.

54. SWBT offers two excuses for its deployment of manual interfaces. First, with respect to resale of complex services and large business orders, SWBT asserts that it uses manual processing for its own customers as well as for those of CLECs. Ham Aff. ¶ 35. SWBT obviously cannot make a similar claim with respect to unbundled elements, because elements such as switching and transport are part of ordinary POTS service for which SWBT has a fully automated ordering process. Similarly, SWBT cannot make a similar claim with respect to provisioning; SWBT obviously knows immediately when it has delayed the date for turning up an order, and when it has in fact completed the order.

55. SWBT's claim is not a much better defense with respect to resale ordering. Even if SWBT processes its own customers' orders manually, this is no reason for CLECs to have to rely on the same inferior process. Use of the same inferior process does not actually provide parity. The SWBT representative has every incentive to treat the CLEC orders worse than the SWBT orders. Certainly, until there has been significant experience with SWBT's business processes, there is no way to know that CLEC orders will be treated the same as SWBT orders. Also, customers are likely to be more skeptical of, and to scrutinize more closely, new entrants as opposed to the BOC, which will magnify for CLECs the effects of problems caused by manual interfaces. Finally, CLEC orders will require manual actions by both CLEC and SWBT service representatives; SWBT orders will only require manual processing by their own service representatives. It therefore appears that CLEC orders will require more manual steps than SWBT orders.

56. The second excuse SWBT offers for deployment of manual interfaces is that industry specifications for automated interfaces have not yet been released. But this is not true for all of the functions SWBT intends to perform manually. For instance, SWBT offers no automated interface for resale orders of more than 30 lines even though EDI ordering standards are not limited in this way. More important, the fact that the industry has not yet agreed on specific fields for ordering of multiline hunting, for example, does not mean that SWBT should be excused from deploying an automated interface to process orders for this service. SWBT knows the general shape of the industry standards. It knows that the industry is committed to EDI. Without inordinate difficulty, it can use the work the industry has done to date as a model to create the specific fields that are needed to order additional services and then replace these fields with industry standards when they are released. This is apparent from SWBT's own SGAT where it reserves the right to supplement standardized interfaces with "requirements developed in advance of industry standards." Statement, OSS App., ¶ 1.10. The problem with respect to ordering is that SWBT has not done so.

57. Alhough it does not do so in its SGAT, SWBT states that it will adopt industry standards within 120 days of their becoming final. Ham Aff. ¶ 31. SWBT should be applauded for this commitment. I feel strongly that this Commission should require similar commitments from other BOCs. Nonetheless, SWBT's commitment does not ensure that SWBT will in fact implement working interfaces in the 120 day time frame. Where the general shape of the industry solution is known, SWBT should not be able simply to await completion of the industry standards before implementing working, automated interfaces, and nonetheless to enter in-region long distance before those standards are completed.